

RPCM R&R NOD1D1

OBJECTIVE:

Remove a failed RPCM and replace it with a spare.

LOCATION:

Installed: NOD1D1

Stowed: √Maintenance Database

DURATION:

30 minutes (If Alcove Shear Panels have been removed)

PARTS:

RPCM-Int Type V (P/N R077419-31)

MATERIALS:

Wet Wipes

Plastic Bags

TOOLS REQUIRED:

Equipment Bag

Tethers

Kit E:

Ratchet 3/8" Drive

6" Ext 3/8" Drive

Driver Handle 1/4" Drive

Kit D:

5/32" Hex Head Driver, 1/4" Drive

EVA Kit:

7/16" x 6" Wobble Socket Extension, 3/8" Drive

Kit G:

(5-35 in-lbs) Trq Driver

(30-200 in-lbs) Trq Wrench

REFERENCED PROCEDURE(S):

RPCM SAFE FOR MAINTENANCE

NODE1 ALCOVE DECK SHEAR PANEL REMOVAL

ACTIVATE RPCM

SAFE

WARNING

Failure to remove power can result in electrical shock hazard.

1. Don Anti-Static wrist tether.
2. Perform RPCM SAFE FOR MAINTENANCE, all (SODF: OSO), then:

ACCESS

3. Remove alcove deck close-out panel, fasteners (ten) (Handle 1/4" Drive, 5/32" Hex Head Driver).
Temporarily stow.

4. If Alcove Deck Shear Panels have not been removed
Perform NODE1 ALCOVE DECK SHEAR PANEL REMOVAL, all
(SODF: OSO), then:

If Alcove Deck Shear panels have been removed
Go to step 5.

REMOVE

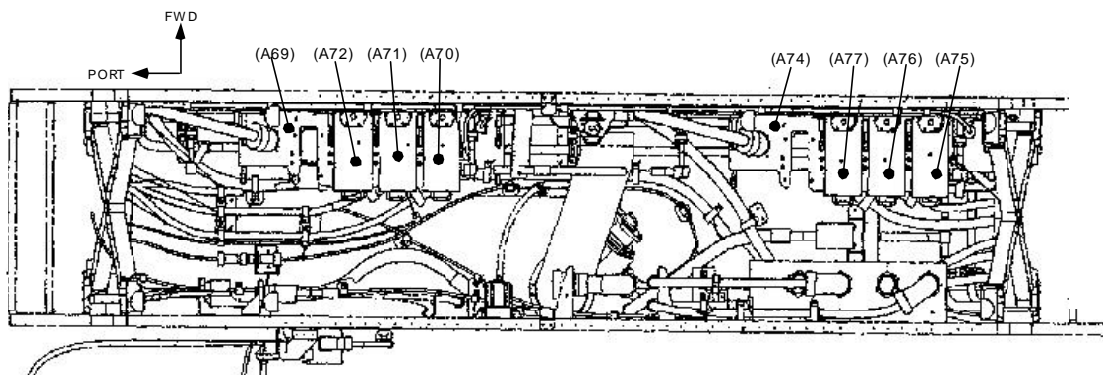


Figure 1.- Nadir View of Node 1 Alcove Deck (with Closeout and Shear Panel Removed).

Table 1. Node 1 Alcove Deck RPDA/RPCM Identification

Name	Ref. Designator	RPCM Type
RPDA N1-RS2	(A74)	N/A
RPCM N1-RS2-A	(A75)	V
RPCM N1-RS2-B	(A76)	V
RPCM N1-RS2-C	(A77)	V
RPDA N1-3B	(A69)	N/A
RPCM N1-3B-A	(A70)	V
RPCM N1-3B-B	(A71)	V
RPCM N1-3B-C	(A72)	V

5. Locate failed RPCM.
See Table 1 and Figure 1.

CAUTION

Failure to fully seat 7/16" x 6" Wobble Socket Extension, apply constant pressure on drive screw could result in damage to RPCM locking mechanisms.

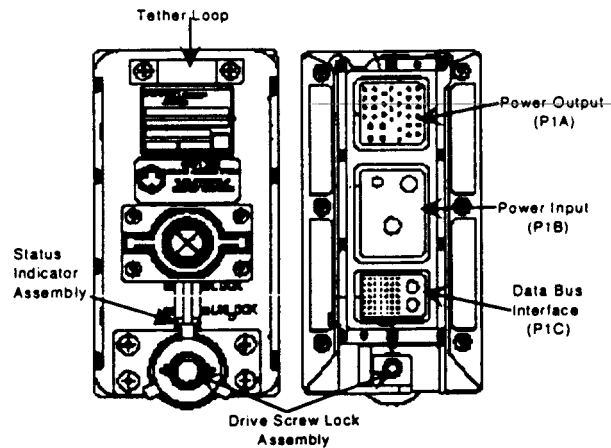


Figure 2.- Remote Power Control Module (Front and Back).

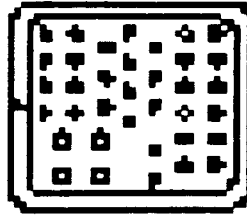
6. Apply pressure, loosen failed RPCM drive screw (Ratchet 3/8" Drive, 7/16" x 6" Wobble Socket Ext).
7. ✓Status indi - UNLOCK
8. Label, remove failed RPCM from receptacle by sliding it off guide rails.
9. Verify replacement RPCM part number RPCM-Int Type V (P/N R077419-31).
10. Remove electrical connector protective caps (two) from replacement RPCM to failed RPCM.
Tmpry stow failed RPCM.

REPLACE

11. Inspect RPCM and mounting location for foreign matter/debris, damage to alignment guides, pins.
12. Clean coldplate bonding surface with wet wipes.

CAUTION

All internal RPCMs have the same physical characteristics. Forcing incorrect spare RPCM into receptacle could bend RPCM connector pins.



RPCM Int-Type V

Figure 3.- RPCM Power Out Connector (Node 1).

13. Verify replacement RPCM Power Out connectors pins.
See Figure 3.
14. Position replacement RPCM on guide rails of RPDA.
15. Insert RPCM into RPCM receptacle until status indicator reaches
UNLOCK position.

CAUTION

Failure to fully seat 7/16" x 6" Wobble Socket Extension, apply constant pressure on drive screw could result in damage to RPCM locking mechanisms.

16. Apply pressure, tighten RPCM drive screw, torque to 60 ± 6 in-lbs
(Ratchet, 3/8" Drive, 7/16" x 6" Wobble Socket Ext, (30-200 in-lbs) Trq
Wrench).
17. ✓Status indi - LOCK

CHECK-OUT

18. Perform ACTIVATE RPCM, all (SODF: OSO), then:

CLOSE-OUT

19. Install nadir closeout panel, fasteners (ten) torque to 14 ± 2 in-lbs (Handle
1/4" Drive, 5/32" Hex Head Driver, (5-35 in-lbs) Trq Driver).

POST MAINTENANCE

20. Stow failed RPCM, tools, equipment.
21. Update Maintenance Database.